



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/060,458	01/30/2002	Fumiaki Arai	58122-Z CCD	6616
7590	04/06/2004			
Christopher C. Dunham c/o Cooper & Dunham LLP 1185 Ave. of the Americas New York, NY 10036			EXAMINER MICHENER, JENNIFER KOLB	
			ART UNIT 1762	PAPER NUMBER

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/060,458

Applicant(s)

ARAI ET AL.

Examiner

Jennifer K Michener

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-21 is/are pending in the application.
- 4a) Of the above claim(s) 13, 15 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11, 12, 14 and 16-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 11, 14, 16, 17, 19, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohta (5,843,560).

Examiner maintains the rejection.

### ***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 12 and 18 are rejected under 35 U.S.C. 103(a) as being obvious over Ohta.

Examiner maintains the rejection.

### ***Response to Arguments***

5. Applicant's arguments filed 1/23/2004 have been fully considered but they are not persuasive.

Art Unit: 1762

Applicant argues that Ohta fails to teach or suggest that the porous resin layer formation coating liquid contains a water-in-oil emulsion of a resin and does not disclose or make obvious any technical effects obtainable by providing the resin in this manner.

Examiner disagrees.

First Examiner notes that the claims do not require any "technical effects" other than creation of a porous resin layer, which Ohta teaches.

Additionally, as outlined in the previous office action and as summarized by Applicant in his response, Ohta teaches that his porous resin layer can contain one or more additives such as a stick-preventing agent and a surfactant and is applied in a mixture of solvents, one "good" and one "bad", such as for example, tetrahydrofuran (THF) and water. Examiner notes that Ohta teaches that silicone, which is an oil, can be used as the stick-preventing lubricant agent. Likewise, THF is an oil. Additionally, surfactants act as emulsifiers. Therefore, the silicone oil and/or THF in the water solvent with an emulsifier, will provide the water-in-oil resin emulsion required by Applicant.

Applicant argues that there is no evidence in Ohta that the above compositions can be used for another purpose, such as providing an emulsion. Namely, it is argued that the silicone oil is merely a stick-preventing agent.

Examiner disagrees.

It is Examiner's position that the above compositions inherently provide the required oil-in-water emulsion. Because the composition of Ohta contains both oils and water, an oil-in-water emulsion is inherently formed regardless of Ohta's intended use of said oil.

Art Unit: 1762

An emulsion is defined as a liquid dispersed in an immiscible liquid, which Ohta teaches by mixing water and oils, which are immiscible. This alone would create an emulsion. However, Examiner additionally pointed out that Ohta teaches the use of a surfactant in his composition. A surfactant is defined as a "surface active agent, esp. as a detergent". An emulsifier is defined as "one that emulsifies, esp. a surface active agent (as a soap)". It appears that a surfactant, such as a detergent or soap, would act as an emulsifier by definition and also because soaps and detergents are designed to form micelles around immiscible oil particles in water using hydrophobic and hydrophilic attractions. The addition of a surfactant would also ensure emulsification. Furthermore, the requirement for the use of a "bad solvent" by Ohta also teaches the use of immiscible materials, such as required by emulsions.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

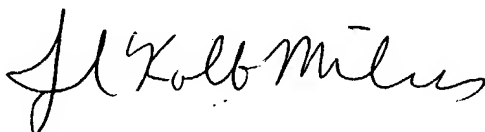
Art Unit: 1762

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer K Michener whose telephone number is (571) 272-1424. The examiner can normally be reached on Monday through Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P. Beck can be reached on 571-272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jennifer Kolb Michener  
Patent Examiner  
Technology Center 1700  
October 19, 2003